

DPH-11 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to report the results of measuring the lidar point cloud data against surveyed ground NVA (nonvegetated vertical accuracy) check points. All XY coordinates and Z values reported are in the selected data units.

NVA (lidar data)

| ID | X | Y | Coverage | Z | Z From Lidar | Z Error | Minimum Z | Median Z | Maximum Z | Intensity | Scan Angle Rank | Returns | Description | Comments |
|-------|------------|-------------|----------|---------|--------------|---------|-----------|----------|-----------|-----------|-----------------|---------|-------------|----------|
| 1143 | 210808.951 | 3331570.848 | Yes | 617.009 | 617.081 | 0.072 | 617.077 | 617.082 | 617.089 | 22357 | 1748 | 1,1,1 | LIPT | |
| 1355 | 233461.977 | 3311931.162 | Yes | 545.302 | 545.299 | -0.003 | 545.278 | 545.284 | 545.303 | 12228 | 699 | 1,1,1 | LIPT | |
| 1357 | 313219.01 | 3292455.333 | Yes | 533.781 | 533.805 | 0.024 | 533.797 | 533.81 | 533.811 | 17051 | 1159 | 1,1,1 | LIPT | |
| 1357A | 319569.076 | 3293463.942 | Yes | 485.624 | 485.566 | -0.058 | 485.562 | 485.565 | 485.579 | 12583 | -671 | 1,1,1 | LIPT | |
| 1361 | 312816.333 | 3297570.866 | Yes | 434.413 | 434.376 | -0.037 | 434.358 | 434.369 | 434.387 | 17087 | -1907 | 1,1,1 | LIPT | |
| 1365 | 296552.164 | 3278212.842 | Yes | 433.018 | 433.07 | 0.052 | 433.068 | 433.069 | 433.075 | 24684 | 77 | 1,1,1 | LIPT | |
| 1366 | 221945.86 | 3312055.375 | Yes | 547.053 | 547.084 | 0.031 | 547.079 | 547.083 | 547.093 | 28883 | 2197 | 1,1,1 | LIPT | |
| 1368 | 294462.567 | 3327125.522 | Yes | 499.199 | 499.192 | -0.007 | 499.181 | 499.192 | 499.196 | 5787 | 2672 | 1,1,1 | LIPT | |
| 1376 | 321347.845 | 3290917.65 | Yes | 537.752 | 537.742 | -0.010 | 537.738 | 537.742 | 537.743 | 11056 | -1165 | 1,1,1 | LIPT | |
| 1382 | 251723.21 | 3300877.921 | Yes | 427.244 | 427.329 | 0.085 | 427.319 | 427.328 | 427.338 | 7092 | 1232 | 1,1,1 | LIPT | |
| 1387 | 252487.699 | 3333832.671 | Yes | 487.6 | 487.612 | 0.012 | 487.61 | 487.612 | 487.623 | 19952 | 841 | 1,1,1 | LIPT | |
| 1389 | 240353.67 | 3305319.331 | Yes | 511.359 | 511.379 | 0.020 | 511.357 | 511.38 | 511.382 | 21231 | 1956 | 1,1,1 | LIPT | |
| 1391 | 271030.267 | 3344424.054 | Yes | 677.551 | 677.503 | -0.048 | 677.495 | 677.518 | 677.54 | 22383 | -2221 | 1,1,1 | LIPT | |
| 1398 | 320367.159 | 3327390.248 | Yes | 566.034 | 566.063 | 0.029 | 566.055 | 566.066 | 566.068 | 16878 | 1033 | 1,1,1 | LIPT | |
| 1399 | 264365.954 | 3297568.71 | Yes | 446.031 | 446.063 | 0.032 | 446.061 | 446.061 | 446.084 | 16620 | 2366 | 1,1,1 | LIPT | |
| 1401 | 307444.656 | 3309801.886 | Yes | 427.76 | 427.79 | 0.030 | 427.779 | 427.8 | 427.82 | 15857 | 2971 | 1,1,1 | LIPT | |
| 1404 | 220134.131 | 3300140.775 | Yes | 417.689 | 417.705 | 0.016 | 417.703 | 417.704 | 417.72 | 20738 | 229 | 1,1,1 | LIPT | |
| 1405 | 289712.503 | 3327461.297 | Yes | 493.331 | 493.316 | -0.015 | 493.31 | 493.316 | 493.318 | 6808 | 496 | 1,1,1 | LIPT | |
| 1410 | 225454.65 | 3346525.6 | Yes | 683.276 | 683.296 | 0.020 | 683.296 | 683.297 | 683.305 | 24000 | 1040 | 1,1,1 | LIPT | |
| 1412 | 296473.217 | 3298496.117 | Yes | 526.228 | 526.207 | -0.021 | 526.197 | 526.213 | 526.219 | 16973 | -1741 | 1,1,1 | LIPT | |
| 1413 | 251596.181 | 3324700.611 | Yes | 566.175 | 566.196 | 0.021 | 566.195 | 566.195 | 566.201 | 15832 | 1458 | 1,1,1 | LIPT | |
| 1418 | 290397.91 | 3267490.906 | Yes | 349.518 | 349.521 | 0.003 | 349.512 | 349.528 | 349.536 | 9714 | -243 | 1,1,1 | LIPT | |
| 1419 | 239899.387 | 3326706.232 | Yes | 605.963 | 606.078 | 0.115 | 606.073 | 606.075 | 606.081 | 19650 | -3358 | 1,1,1 | LIPT | |
| 1422 | 210471.677 | 3317712.889 | Yes | 615.803 | 615.853 | 0.050 | 615.839 | 615.854 | 615.855 | 12571 | 1781 | 1,1,1 | LIPT | |
| 1423 | 228996.705 | 3334118.003 | Yes | 642.587 | 642.564 | -0.023 | 642.542 | 642.563 | 642.58 | 28858 | 2310 | 1,1,1 | LIPT | |
| 1425 | 332032.731 | 3321381.686 | Yes | 539.839 | 539.837 | -0.002 | 539.829 | 539.846 | 539.865 | 10802 | 175 | 1,1,1 | LIPT | |
| 1426 | 267318.686 | 3313365.94 | Yes | 525.461 | 525.499 | 0.038 | 525.494 | 525.506 | 525.512 | 16497 | 1174 | 1,1,1 | LIPT | |
| 1432 | 289058.636 | 3285646.191 | Yes | 479.444 | 479.451 | 0.007 | 479.437 | 479.455 | 479.457 | 13410 | -1662 | 1,1,1 | LIPT | |
| 1432A | 288286.169 | 3286883.828 | Yes | 470.394 | 470.379 | -0.015 | 470.367 | 470.376 | 470.401 | 14478 | 1002 | 1,1,1 | LIPT | |
| 1436 | 292162.795 | 3309189.533 | Yes | 480.683 | 480.694 | 0.011 | 480.692 | 480.695 | 480.706 | 16121 | 2342 | 1,1,1 | LIPT | |

Check Points Vertical Accuracy - continued

| ID | X | Y | Coverage | Z | Z From Lidar | Z Error | Minimum Z | Median Z | Maximum Z | Intensity | Scan Angle Rank | Returns | Description | Comments |
|-------|------------|-------------|----------|---------|--------------|---------|-----------|----------|-----------|-----------|-----------------|---------|-------------|----------|
| 1440 | 308601.373 | 3317426.607 | Yes | 478.335 | 478.344 | 0.009 | 478.334 | 478.347 | 478.348 | 11240 | -3063 | 1,1,1 | LIPT | |
| 1441 | 272543.909 | 3326881.762 | Yes | 623.58 | 623.614 | 0.034 | 623.613 | 623.613 | 623.62 | 18520 | -2302 | 1,1,1 | LIPT | |
| 1442 | 326602.51 | 3305334.113 | Yes | 537.711 | 537.662 | -0.049 | 537.652 | 537.666 | 537.67 | 15145 | -1014 | 1,1,1 | LIPT | |
| 1446 | 267616.68 | 3322304.246 | Yes | 583.637 | 583.75 | 0.113 | 583.73 | 583.735 | 583.756 | 19375 | 433 | 1,1,1 | LIPT | |
| 1447 | 293625.658 | 3269785.231 | Yes | 391.611 | 391.593 | -0.018 | 391.579 | 391.594 | 391.599 | 14455 | -1208 | 1,1,1 | LIPT | |
| 1449 | 254311.848 | 3342128.582 | Yes | 505.079 | 505.09 | 0.011 | 505.061 | 505.075 | 505.098 | 18388 | 811 | 1,1,1 | LIPT | |
| 1450 | 283170.551 | 3345827.191 | Yes | 570.1 | 570.115 | 0.015 | 570.108 | 570.113 | 570.124 | 13255 | 1327 | 1,1,1 | LIPT | |
| 1451 | 328912.713 | 3311469.843 | Yes | 603.762 | 603.788 | 0.026 | 603.776 | 603.791 | 603.815 | 12776 | 1264 | 1,1,1 | LIPT | |
| 1460 | 299469.163 | 3267722.7 | Yes | 359.134 | 359.146 | 0.012 | 359.139 | 359.142 | 359.185 | 5687 | -3567 | 1,1,1 | LIPT | |
| 1460A | 299463.564 | 3267734.995 | Yes | 358.917 | 358.926 | 0.009 | 358.893 | 358.898 | 358.939 | 16922 | -2873 | 1,1,1 | LIPT | |
| 1467 | 310274.398 | 3274818.28 | Yes | 366.706 | 366.677 | -0.029 | 366.668 | 366.688 | 366.694 | 7484 | 487 | 1,1,1 | LIPT | |
| 1469 | 269245.566 | 3296123.581 | Yes | 433.429 | 433.443 | 0.014 | 433.426 | 433.436 | 433.449 | 19525 | 697 | 1,1,1 | LIPT | |
| 1473 | 321826.292 | 3319805.47 | Yes | 643.518 | 643.505 | -0.013 | 643.499 | 643.509 | 643.51 | 14390 | -3143 | 1,1,1 | LIPT | |
| 1475 | 285749.957 | 3291696.912 | Yes | 513.003 | 513.044 | 0.041 | 513.038 | 513.045 | 513.047 | 17669 | -507 | 1,1,1 | LIPT | |
| 1479 | 275049.028 | 3288323.245 | Yes | 435.667 | 435.692 | 0.025 | 435.689 | 435.693 | 435.704 | 12826 | -224 | 1,1,1 | LIPT | |
| 1480 | 210322.727 | 3314900.627 | Yes | 629.989 | 630.059 | 0.070 | 630.055 | 630.059 | 630.06 | 22904 | 2179 | 1,1,1 | LIPT | |
| 1482 | 264515.599 | 3345999.596 | Yes | 575.161 | 575.228 | 0.067 | 575.223 | 575.227 | 575.228 | 6623 | -2288 | 1,1,1 | LIPT | |
| 1485 | 283672.565 | 3312199.531 | Yes | 541.48 | 541.494 | 0.014 | 541.476 | 541.49 | 541.504 | 13662 | -1148 | 1,1,1 | LIPT | |
| 1486 | 233488.761 | 3302814.992 | Yes | 527.245 | 527.291 | 0.046 | 527.286 | 527.289 | 527.298 | 21222 | -497 | 1,1,1 | LIPT | |
| 1488 | 284508.795 | 3301676.379 | Yes | 465.545 | 465.591 | 0.046 | 465.591 | 465.591 | 465.599 | 15197 | 1615 | 1,1,1 | LIPT | |
| 1494 | 235989.227 | 3315578.091 | Yes | 552.6 | 552.583 | -0.017 | 552.571 | 552.58 | 552.592 | 16376 | -802 | 1,1,1 | LIPT | |
| 1496 | 218399.573 | 3316549.649 | Yes | 569.509 | 569.446 | -0.063 | 569.427 | 569.447 | 569.448 | 22545 | 0 | 1,1,1 | LIPT | |
| 1500 | 290360.445 | 3285776.961 | Yes | 466.339 | 466.326 | -0.013 | 466.302 | 466.326 | 466.337 | 11901 | -725 | 1,1,1 | LIPT | |
| 1500A | 289671.133 | 3285779.917 | Yes | 470.63 | 470.617 | -0.013 | 470.601 | 470.607 | 470.625 | 10765 | -798 | 1,1,1 | LIPT | |
| 1507 | 250838.26 | 3312946.792 | Yes | 491.054 | 491.041 | -0.013 | 491.028 | 491.038 | 491.051 | 19143 | -1461 | 1,1,1 | LIPT | |
| 1516 | 325582.611 | 3298583.151 | Yes | 509.257 | 509.253 | -0.004 | 509.245 | 509.248 | 509.267 | 2981 | 1888 | 1,1,1 | LIPT | |
| 1519 | 315140.681 | 3267745.061 | Yes | 357.101 | 357.068 | -0.033 | 357.061 | 357.102 | 357.115 | 12184 | -2294 | 1,1,1 | LIPT | |
| 1520 | 281506.571 | 3322500.868 | Yes | 591.79 | 591.842 | 0.052 | 591.825 | 591.833 | 591.844 | 13112 | -2292 | 1,1,1 | LIPT | |
| 1520A | 279033.196 | 3328386.641 | Yes | 620.858 | 620.972 | 0.114 | 620.962 | 620.967 | 620.997 | 13831 | -1889 | 1,1,1 | LIPT | |
| 1524 | 324452.151 | 3294209.734 | Yes | 503.508 | 503.504 | -0.004 | 503.491 | 503.491 | 503.528 | 5613 | -2146 | 1,1,1 | LIPT | |
| 1526 | 276299.464 | 3336874.734 | Yes | 643.291 | 643.255 | -0.036 | 643.241 | 643.26 | 643.261 | 5518 | 2359 | 1,1,1 | LIPT | |
| 1530 | 335040.26 | 3329586.446 | Yes | 583.011 | 583.013 | 0.002 | 582.981 | 583.003 | 583.026 | 10591 | -3017 | 1,1,1 | LIPT | |
| 1531 | 258516.59 | 3300058.554 | Yes | 444.224 | 444.317 | 0.093 | 444.312 | 444.317 | 444.327 | 14930 | 7 | 1,1,1 | LIPT | |
| 1536 | 292582.736 | 3317218.635 | Yes | 461.491 | 461.507 | 0.016 | 461.502 | 461.505 | 461.52 | 11395 | 682 | 1,1,1 | LIPT | |
| 1537 | 317436.438 | 3276093.137 | Yes | 415.22 | 415.184 | -0.036 | 415.174 | 415.181 | 415.192 | 9442 | -2214 | 1,1,1 | LIPT | |

Check Points Vertical Accuracy - continued

| ID | X | Y | Coverage | Z | Z From Lidar | Z Error | Minimum Z | Median Z | Maximum Z | Intensity | Scan Angle Rank | Returns | Description | Comments |
|--------|------------|-------------|----------|---------|--------------|---------|-----------|----------|-----------|-----------|-----------------|---------|-------------|----------|
| 1544 | 283402.034 | 3288792.578 | Yes | 483.263 | 483.313 | 0.050 | 483.305 | 483.308 | 483.327 | 10462 | 3126 | 1,1,1 | LIPT | |
| 801001 | 234602.618 | 3304660.913 | Yes | 537.432 | 537.412 | -0.020 | 537.393 | 537.405 | 537.421 | 23325 | 494 | 1,1,1 | LIPT | |
| 801003 | 218211.499 | 3302934.147 | Yes | 517.734 | 517.725 | -0.009 | 517.724 | 517.727 | 517.743 | 21365 | 712 | 1,1,1 | LIPT | |
| 801005 | 212313.059 | 3331077.61 | Yes | 606.922 | 606.957 | 0.035 | 606.949 | 606.955 | 606.973 | 21786 | 763 | 1,1,1 | LIPT | |
| 801007 | 212325.132 | 3331059.541 | Yes | 607.192 | 607.284 | 0.092 | 607.272 | 607.277 | 607.286 | 22066 | 834 | 1,1,1 | LIPT | |